

Environmental Protection Agency

§ 63.1318

§ 63.1317 PET and polystyrene continuous process affected sources—monitoring provisions.

Continuous process vents using a control or recovery device to comply with § 63.1316 shall comply with the applicable monitoring provisions specified for continuous process vents in § 63.1315(a), except as specified in paragraphs (a) and (b) of this section.

(a) For the purposes of paragraph (a) of this section, owners or operators shall ignore references to group determinations (i.e., total resource effectiveness) and are not required to comply with § 63.113.

(b) The monitoring period for condenser exit temperature when complying with § 63.1316(b)(1)(i)(B) or § 63.1316(c)(1)(ii) shall be each consecutive 3-hour continuous period (e.g., 6 am to 9 am, 9 am to 12 pm). Each owner or operator shall designate said monitoring period in the Notification of Compliance Status required by § 63.1335(e)(5).

§ 63.1318 PET and polystyrene continuous process affected sources—testing and compliance demonstration provisions.

(a) Except as specified in paragraphs (b) through (d) of this section, continuous process vents using a control or recovery device to comply with § 63.1316 shall comply with the applicable testing and compliance provisions for continuous process vents specified in § 63.1315, except that, for the purposes of this paragraph (a), owners or operators shall ignore references to group determination (i.e., total resource effectiveness) and are not required to comply with § 63.113.

(b) *PET Affected Sources Using a Dimethyl Terephthalate Process—Applicability Determination Procedure.* Owners or operators shall calculate organic HAP emissions from the collection of material recovery sections at an existing affected source producing PET using a continuous dimethyl terephthalate process to determine whether § 63.1316(a)(1)(i) is applicable using the procedures specified in either paragraph (b)(1) or (b)(2) of this section.

(1) Use Equation 1 of this subpart to determine mass emissions per mass

product as specified in paragraphs (b)(1)(i) and (b)(1)(ii) of this section.

$$ER = \sum_{i=1}^n \frac{E_i}{(0.001 P_p)} \quad [\text{Eq. 1}]$$

where:

ER=Emission rate of total organic HAP or TOC, kg/Mg product.

E_i =Emission rate of total organic HAP or TOC in continuous process vent i , kg/hr.

P_p =The rate of polymer produced, kg/hr.

n =Number of continuous process vents in the collection of material recovery sections at the affected source.

0.001=Conversion factor, kg to Mg.

(i) The mass emission rate for each continuous process vent, E_i , shall be determined according to the procedures specified in § 63.116(c)(4). The sampling site for determining whether § 63.1316(a)(1)(i) is applicable shall be before any add-on control devices (i.e., those required by regulation) and after those recovery devices installed as part of operating the material recovery section. When the provisions of § 63.116(c)(4) specify that Method 18, 40 CFR part 60, appendix A shall be used, Method 18 or Method 25A, 40 CFR part 60, appendix A may be used for the purposes of this subpart. The use of Method 25A, 40 CFR part 60, appendix A shall comply with paragraphs (b)(1)(i)(A) and (b)(1)(i)(B) of this section.

(A) The organic HAP used as the calibration gas for Method 25A, 40 CFR part 60, appendix A shall be the single organic HAP representing the largest percent by volume of the emissions.

(B) The use of Method 25A, 40 CFR part 60, appendix A is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

(ii) The rate of polymer produced, P_p (kg/hr), shall be determined by dividing the weight (kg) of polymer pulled from the process line during the performance test by the number of hours taken to perform the performance test. The

weight of polymer pulled shall be determined by direct measurement or by an alternate methodology, such as materials balance. If an alternate methodology is used, a description of the methodology, including all procedures, data, and assumptions shall be submitted as part of the Notification of Compliance Status required by § 63.1335(e)(5).

(2) Use engineering assessment, as described in § 63.1323(b)(6)(i), to demonstrate that mass emissions per mass product are less than or equal to 0.07 kg organic HAP/Mg product. If engineering assessment shows that mass emissions per mass product are greater than 0.07 kg organic HAP/Mg product and the owner or operator wishes to demonstrate that mass emissions per mass product are less than the threshold emission rate of 0.12 kg organic HAP/Mg product, the owner or operator shall use the procedures specified in paragraph (b)(1) of this section.

(c) *Compliance with Mass Emissions per Mass Product Standards.* Owners or operators complying with § 63.1316(b)(1)(i)(A), (b)(1)(ii), (b)(2)(i), (b)(2)(ii), and (c)(1)(i) shall demonstrate compliance with the mass emissions per mass product requirements using the procedures specified in paragraph (b)(1) of this section, except that the sampling site specified in paragraph (b)(1)(i) of this section shall be at the outlet of the last control or recovery device.

(d) *Compliance with Temperature Limits for Final Condensers.* Owners or operators complying with § 63.1316(b)(1)(i)(B) or § 63.1316(c)(1)(ii) shall perform an initial performance test as specified in paragraph (d)(1) of this section to demonstrate initial compliance with the temperature limit requirements and shall demonstrate continuous compliance as specified in paragraph (d)(2) of this section.

(1) Using the temperature monitoring device specified by the applicable monitoring provisions specified for continuous process vents in § 63.1315, an average exit temperature shall be determined based on the average exit temperature for three performance tests. The average exit temperature for each 3-hour performance test shall be based on measurements taken at least every 15 minutes for 3 hours of continuous

operation under maximum representative operating conditions for the process. For emissions streams containing continuous and batch process vents, the maximum representative operating conditions shall be during periods when batch emission episodes are venting to the control device resulting in the highest concentration of organic HAP in the emissions stream.

(2) As specified in § 63.1317(b), continuous compliance shall be determined based on an average exit temperature determined for each consecutive 3-hour continuous period. Each 3-hour period where the average exit temperature is more than 6 °C (10 °F) above the applicable specified temperature limit shall be considered an exceedance of the monitoring provisions.

§ 63.1319 PET and polystyrene continuous process affected sources—recordkeeping provisions.

(a) Except as specified in paragraphs (b) and (c) of this section, owners or operators using a control or recovery device to comply with § 63.1316 shall comply with the applicable recordkeeping provisions specified in § 63.1315, except that, for the purposes of this paragraph (a), owners or operators shall ignore references to group determinations (i.e., total resource effectiveness) and are not required to comply with § 63.113.

(b) *Records Demonstrating Compliance With the Applicability Determination Procedure for PET Affected Sources Using a Dimethyl Terephthalate Process.* Each owner or operator, as appropriate, shall keep the following data, as appropriate, up-to-date and readily accessible:

(1) Results of the mass emissions per mass product calculation specified in § 63.1318(b).

(2) If complying with § 63.1316 by demonstrating that mass emissions per mass product are less than or equal to the level specified in § 63.1316(a)(1)(i), the information specified in paragraphs (b)(2)(i) and (b)(2)(ii) of this section.

(i) Each process operation variable (e.g., pressure, temperature, type of catalyst) that may result in an increase in the mass emissions per mass product should said variable be changed.